



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**  
**REGION 10**  
**OREGON OPERATIONS OFFICE**  
805 SW Broadway, Suite 500  
Portland, Oregon 97205

November 24, 2009

Mr. Robert Wyatt  
Northwest Natural & Chairman, Lower Willamette Group  
220 Northwest Second Avenue  
Portland, Oregon 97209

Re: Portland Harbor Superfund Site; Administrative Order on Consent for Remedial Investigation and Feasibility Study; Docket No. CERCLA-10-2001-0240 – Contaminant Fate and Transport Modeling Approach

Dear Mr. Wyatt:

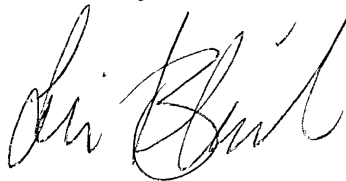
On September 16, 2009, the Lower Willamette Group proposed transitioning from the Abiotic Fate and Transport (AFT) model developed by EPA with assistance from Bruce Hope to the QEAFATE Contaminant Fate and Transport Model. In order to evaluate this proposal, the LWG provided EPA with background information on the history and application of QEAFATE and presented the proposed QEAFATE fate and transport modeling approach in a meeting with EPA and its government partners on November 18, 2009. Based on the information presented, EPA approves the use of the QEAFATE model over the AFT model. EPA believes that significant advantages will be realized in transitioning from the AFT model to the QEAFATE model as long as those advantages are not outweighed by a loss in transparency. In order to ensure a transparent process, the LWG should continue to work in a collaborative manner with EPA and its government partners on the overall modeling approach for the Portland Harbor site.

In moving forward with calibration of the QEAFATE model, the following approaches should be considered and followed:

1. The LWG should provide the QEAFATE modeling code to EPA to improve model transparency and facilitate EPA review of the model.
2. The list of chemicals to be modeled should be expanded to include 4,4'-DDE. In addition, the strengths and weaknesses of modeling total PCBs rather than individual PCB congeners should be further explored.
3. A list of calibration parameters should be submitted to EPA prior to completing calibration of the model.
4. Calibrated model runs should be used to validate the assumption that there has not been a significant change in sediment chemistry in the 1997 – 2009 time frame for the purpose of establishing initial conditions.

EPA requests that the LWG provide a response to EPA within 30 days describing how the issues raised in this letter will be addressed as part of the LWG's modeling approach. If you have any questions regarding this matter, please contact Chip Humphrey at (503) 326-2678 or Eric Blischke (503) 326-4006. All legal inquiries should be directed to Lori Cora at (206) 553-1115.

Sincerely,

A handwritten signature in black ink, appearing to read 'Chip Humphrey', with a stylized, cursive script.

Chip Humphrey  
Eric Blischke  
Remedial Project Managers

cc: Greg Ulirsch, ATSDR  
Rob Neely, NOAA  
Ted Buerger, US Fish and Wildlife Service  
Preston Sleeper, Department of Interior  
Jim Anderson, DEQ  
Kurt Burkholder, Oregon DOJ  
David Farrer, Oregon Environmental Health Assessment Program  
Rick Keppler, Oregon Department of Fish and Wildlife  
Michael Karnosh, Confederated Tribes of Grand Ronde  
Tom Downey, Confederated Tribes of Siletz  
Audie Huber, Confederated Tribes of Umatilla  
Brian Cunninghame, Confederated Tribes of Warm Springs  
Erin Madden, Nez Perce Tribe  
Rose Longoria, Confederated Tribes of Yakama Nation